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April 1945

War Food Administration  
Office of Marketing Services  
Nutrition Programs Branch

Case History  
of a  
Nutrition Committee Activity

HOW PUERTO RICANS ARE BEING TAUGHT TO USE NATIVE FOODS 1/  
(A Nutrition Committee Case History)

The Background

The island of Puerto Rico, a territory of the United States since 1898, is far down in the Caribbean. It was populated by native Indians when Columbus discovered it. The Spaniards seeking gold came soon afterwards. Because of Puerto Rico's tropical, frost-free climate, people from Africa were brought to work in its fertile fields. Today some families, after 400 years, are of pure racial stock and some have intermarried with the other races, but all have adjusted to living without friction in the same communities.

The extremely high birth rate in Puerto Rico has made it one of the most densely populated areas on the face of the globe. The children reach school age faster than the Government can build schools for their use. This does not greatly disturb Puerto Ricans of the poorer classes.

The Problem

A climate which supports a year-round growth of pineapples, breadfruit, mameys, mangoes, jobos, coconuts, guavas and other exotic fruits, as well as avocados, grapefruit, oranges, melons, bananas, tomatoes, radishes, cucumbers, string beans, peppers, yams, and other fruits and vegetables, suggests a people whose tables would be constantly graced with different foods. But not all the Puerto Ricans use the fresh vegetables and fruits. Instead they serve rice, lard, beans, and codfish every day in the year that they can obtain and afford them. The well-to-do families will add meat, poultry, vegetables and fruits, but the codfish, beans, rice, and lard for seasoning the rice, are almost always present except in the lowest income groups who live largely on starchy vegetables and black coffee.

The town of Yabucoa is typical of all Puerto Rico, in that it has a cash-crop economy. The income of most of the families in the Yabucoa area, both rural and urban, comes from work at the sugar fields or centrals. Sugarcane is the main cash crop, and the best and most productive land is devoted to it.

Laborers are chiefly part-time employees. Only a small percentage of the population in the Yabucoa area own land. Those who farm have small places on the hillsides, ranging from an acre to ten acres. The land is very hilly, tillage methods are poor. Cutting the trees for lumber or charcoal for cooking has left the land bare. These are factors which have left the soils of these farms badly depleted.

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1/ By Nell Enloe Smith, Nutrition Programs Branch, Office of Marketing Services, WFA, based on references cited on page 1, and on unpublished reports by Lydia J. Roberts, University of Chicago.

Puerto Rico, an island, would be expected to have a sizable fishing industry. But it does not. Commercial refrigeration as well as commercial distribution, as we know it, is decidedly limited. Freshly caught fish may lie a half day in a boat under the tropic sun, then it is carried in a vender's "head basket" again in the sun before it reaches the home cook-pots; so the people, having been made ill by the locally caught fish are afraid to eat it. Work, however, is underway to develop a fishing industry for Puerto Rico which will include satisfactory refrigeration and distribution of fresh fish, and also methods of drying fish. This development will, of course, take time, particularly with the present wartime limitations on equipment of all types. But ultimately this home fishing industry should be a great boon to the Puerto Rican food supply, and an important nutritional asset because protein is particularly lacking in the diets of the low-income families.

During the off-season in the sugarcane industry, the poorer families of the lowest income level in the Yabucoa area may have the following diet: black coffee with a little sugar for breakfast. While at work they take a midmorning meal around 9 o'clock which consists of more coffee, usually without milk, a piece of bread or some starchy vegetable. At lunch time they have large amounts of boiled starchy vegetables and black coffee; and when they can afford it and obtain it, they always have codfish. For the evening meal they again have starchy vegetables or rice and beans, which, to save fuel, may have been cooked at noon. If they are very poor they may not have enough food to stretch into another meal and so go to bed without any food after the noontime meal.

Decided food preferences and fixed food taboos against many native vegetables and fruits also limit the meals.

With the advent of war, enemy submarines menaced the shipping lanes of the Atlantic. This, to Puerto Ricans, meant a crisis in their food situation. No longer could they depend upon regular shipments of their favorite codfish, lard, and beans. To provide an opportunity for mobilizing the nutrition forces of the island a Nutrition Workshop was held at the University of Puerto Rico in Rio Piedras. Dr. Lydia J. Roberts of the University of Chicago, an outstanding scientist in the field of nutrition, directed this Workshop. It was sponsored as a demonstration project by the insular Nutrition Committee in cooperation with the Nutrition Programs Branch, then a part of the former Food Distribution Administration, now a part of the Office of Marketing Services, War Food Administration.

Since food from the mainland was drastically limited because of the war, members of the Workshop group turned their attention to making a practical survey of what the island offered both in assets and liabilities. Recognizing the importance of better nutrition for Puerto Ricans, the Workshop participants found they were faced with a number of such difficult factors as (1) low incomes; (2) poor food habits; (3) food taboos and food fallacies; (4) small percentage of land ownership. Recognizing the limitations these factors cause, the workshop participants considered ways and means of obtaining better nutrition for Puerto Ricans.

One of the first things the participants from various regions did was to list the daily diets of the four income levels into which they had divided the island. Then they set up the actual meals---breakfast, dinner, and supper---for each income group, with graphs showing the nutritive values. As was to be expected, the low income group, which lives chiefly on starchy vegetables and coffee, were deficient in everything except possible calories and iron; while even the top 5



percent who had a very high income level did not reach the standard in all respects. One of the groups at the workshop then took the food in the full day's diets for the lowest and highest income levels, as they had previously worked them out, ground it, dried it, and used it, for feeding two groups of rats. Even though the time for the experiment was short, the results convinced the most dubious that Puerto Rican diets needed to be improved. All the participants came to the conclusion that much could be done if they banded together and worked, each stimulating the people in his or her area to help.

### Reaching the People

With Puerto Rico one of the most densely populated areas of the world (1,500 people per acre of arable land), obviously it would be impossible to have highly-trained food specialists go into each kitchen on the island to tell the homemaker the "why" of new foods and the "how" of preparing them. Nor could one worker, alone, reach all the people as quickly as they needed to be reached.

When all groups cannot take daily papers or listen to the radio or read magazines, the problem of communication becomes an important one. Psychology is also involved. One woman alone cooking over her charcoal fire is not apt to change her family's dinner from a liked food to an unknown food, unless she knows something very worth while about it, and knows how it will taste and how to prepare it.

To encourage the wider use of native foods and at the same time improve the food value of the diets on the island, one answer was for the participants of the workshop, returning to their communities, to gather into groups all the people who could help. Participant after participant went back to his or her town, called meetings, and organized nutrition committees. First they explained the problem; then, through panel discussions and informal conversations, decided what they could do about it in the light of the practical solutions they had reached at the workshop.

### Shortening the Line of Communication

Organizing as a nutrition committee meant that each member understood the need for a coordinated approach to the problem. Thus, each one working in his own field could tell the story and by repetition strengthen it and stimulate action. The home demonstration agent could reach a number of people at once by a group demonstration. She could tell her listeners that eating soybeans instead of the more familiar beans would give greater strength and endurance for the long hours in the cane fields. She could show the women how to prepare the new beans for taste appeal. She would let them taste the dishes made from soybeans so they would know that spending the scant family funds for soybeans would be worth while. The Farm Security workers could distribute soybean seed and teach the farmers whom they help, how to plant and harvest the beans, while at the same time telling about their high nutritive value.

The Public Health nutritionist could point out the food value of soybeans to the families with whom she works. At school the teachers could tell the children that eating soybeans would make them grow taller and stronger. This would help condition them to eating a new food at home -- some Puerto Ricans prefer going hungry to eating a food they do not like. The school lunch supervisor could

serve soybean dishes at school, thereby teaching the children to like their good flavor while providing them with better nutrition.

Following this general pattern, nutrition committee members have given demonstrations on the use of dehydrated eggs in omelets, scrambled with "sofrito," <sup>1/</sup> in punches, eggnog, and custards. Demonstrations showed how to combine soybeans with the rice they like so well. They learned how good soybeans are when toasted, as croquettes, in salads, and even made into soybean milk. Definite campaigns have been carried out to teach the people to eat greens and green and yellow vegetables. They have explained that fruits combined are not poisonous. But perhaps the most persistent food taboo they have been clearing up is the one against their native fruits. Some of the native fruits are very high in badly needed vitamin values. Guavas have a high vitamin C content, but the people scorn the guavas and cut the trees down. When they could afford to do so, they bought canned fruit juices with food value so low that there was little to commend them except flavor appeal. Now, under the influences of the various nutrition committee members, the report comes that farmers are planting guava trees.

The Extension groups, Farm Security workers, and Vocational agriculture teachers had previously worked out plans for year-round gardens which would provide good nutrition. The nutrition committee members are now building campaigns around these garden plans and publicizing them in every way. This coordinated effort and wide publicity may begin to break down the Puerto Rican idea that working with one's hands lowers one's social position.

Convinced that "seeing is believing," nutrition committees have repeated the Workshop rat-feeding demonstration in their own communities, and other groups are planning to repeat it. This is perhaps the most valuable teaching device that could be used with a group of people whose food habits have been based upon a set group of traditional foods for so long a time. To tell a person that eating turnip greens, or any other food, will do certain things for him is to make a statement in the hope that it will be believed. If he sees that food fed to an animal and sees that animal not only live, but look better than an animal fed on the food which the person is accustomed to eating, he will be convinced.

And so they worked. School principals, grade school teachers, home economics teachers, Public Health workers, extension workers, farm and home supervisors, WPA workers, WFA workers, and interested lay persons, all joining in a coordinated approach to put new foods into Puerto Rican pots. This changing of diet preferences will not be accomplished over night. It will take time to change long established food habits. But slowly, with all agencies concerned with nutrition working together, something is being done. The start has been made, and the results of the Nutrition Workshop are beginning to show to a remarkable extent.

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<sup>1/</sup> A basic sauce made from green tomatoes, minced onion, peppers, tomato sauce, fat pork, lard, and other seasonings which is used to season beans and other prepared dishes.

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